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REPORT BY THE U.S.

General Accounting Office

DOD Can Save Millions Of Dollars By Improving The Management Of Air Force Inventories

Two Air Force air logistics centers had over \$50 million in excess stocks on order for items for which they had over \$8 million of stock onhand exceeding current needs.

The Air Force Stock Fund's obligational authority was inflated by an estimated \$25.5 million.

This report shows how the Department of Defense can save tens of millions of dollars annually.



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LCD-80-6
OCTOBER 25, 1979



UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

LOGISTICS AND COMMUNICATIONS
DIVISION

B-146828

The Honorable Harold Brown
The Secretary of Defense

Dear Mr. Secretary:

This report demonstrates how the Department of Defense can save tens of millions of dollars annually in procurement costs by eliminating a costly overstocking criteria currently used by the Air Force.

Chapters 2 and 3 of this report contain our recommendations for corrective action. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; the Administrator of General Services; and the Secretary of the Air Force.

Sincerely yours,

R. W. Gutmann
Director

*Procurement
Policy
evaluation*
*COST control
Procurement practices
Air Force procurement
Inventory controls
procedures or practice
evaluation*

D I G E S T

The Department of Defense (DOD) can save tens of millions of dollars annually in procurement by:

- ⌈--Eliminating a permissive overstockage policy that prevents identification and cancellation of planned purchases of supplies exceeding requirements. For example, two air logistics centers did not identify, and made no attempt to cancel, planned purchases of supplies valued at \$23.1 million for items with stock already onhand that exceeded requirements by \$8.3 million. (See p. 3.)
- ⌈--Eliminating duplicate requirements in Air Force purchase computations. As a result, GAO estimates that the Air Force's requirements and related obligational authority for expenditure of stock funds was inflated by \$25.5 million in fiscal year 1979. In addition, GAO identified overprocurements of \$6.7 million at two air logistics centers because of these duplicate requirements. (See p. 4.)
- ⌈--Requiring more effective or timely identification and cancellation of excess requirements. The Air Force could have canceled as much as \$6.2 million at the two centers. (See p. 6.)
- ⌈ Filling war readiness material and foreign military sales requirements from available assets could have avoided or deferred purchases of as much as \$2.1 million at the two centers. (See p. 7.)

To avoid inflating inventories and procurement costs, the Secretary of Defense should require the Air Force to

- eliminate its permissive overstockage policy,
- revise computer programs so that duplicate requirements are not included in the "buy computations,"
- provide for more timely identification and effective cancellation of excess stock on order, and
- fill war readiness and foreign sales requirements from available stocks to the maximum extent practicable.

In addition, the cost of issuing many low-cost items exceeded the value of sales revenue for the items. The large volume of these issues made yearly by Air Force depots could be reduced substantially and significant savings in warehouse handling costs could be realized by establishing more economical units of issue.

The repetitive issue of low-cost items in small quantities is a Government-wide problem. GAO has reported similar problems in the General Services Administration (GSA). GSA agreed that benefits could be gained by more economical issues of low-cost items but stated it was governed by DOD policy since DOD was its largest customer.

The Secretary of Defense, in coordination with GSA, should review the units of issue of low-cost items to

- increase the unit of issue quantities in supply catalogs to minimum commercial standard packs, wherever feasible;
- require that unit pack quantities be determined in accordance with prescribed standards; and

--emphasize the need to establish more economical units of issue when new items are entered in the supply system.

DOD concurred in whole or in part with GAO's recommendations. In response to the recommendation that the Air Force eliminate permissive overstockage from its computations of excess stocks on order, DOD stated that an additional level of overstocking is justified to avoid a repetitive series of procurement and cutback actions caused by fluctuations in demand. DOD also said there is no specific justification for the 6-month overstockage level used by the Air Force, and that the Air Force has been requested to review procedures of other DOD components for identifying and canceling excess stocks on order.

In GAO's opinion, uneconomical repetitive series of procurements are avoidable if requirements for stock are computed correctly and in a timely manner. Furthermore, unpredictable fluctuations in demand are, by DOD definition and Air Force regulation, provided for through safety level stocks. Therefore, rather than review procedures of other DOD components, the Air Force should eliminate its permissive overstockage policy. Also, since neither the Army, nor the Navy, nor GSA has such a policy, further study is unnecessary.

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ABBREVIATIONS

AFB	Air Force Base
DOD	Department of Defense
GAO	General Accounting Office
GSA	General Services Administration

CHAPTER 1

INTRODUCTION

The Air Force Logistics Command is responsible for technical and logistics support of Air Force weapon systems. The command carries out its responsibilities at headquarters located at Wright-Patterson Air Force Base (AFB), Ohio, and at five air logistics centers. These five centers collectively manage 837,000 Air Force items of supply. At each center, an item is assigned to an item manager who determines worldwide requirements, quantities to be acquired, and where and how many items should be stocked.

The Oklahoma City and San Antonio Air Logistics Centers manage about 123,000 items and 191,000 items, respectively. The inventory value of items stocked at these depots totaled \$3.4 billion as of September 30, 1978. About \$941 million of the inventory consisted of expendable items procured on an economic order quantity basis under the System Support Stock Fund, which is the largest of seven divisions of the Air Force Stock Fund. Stock Fund items are generally nonreparable items which the centers "sell" to using organizations as needed in day-to-day Air Force operations. Inventories are financed from (1) annual appropriations for investment or reparable items and (2) sales revenue for items controlled by the stock funds. Our review was directed primarily toward System Support Stock Fund items.

To maintain low inventory investment and still provide expendable supplies to users, the Air Force periodically computes its requirement objectives for managed items. The requirement objective represents the quantity to meet needs for a future time period. For items bought on an economic order quantity basis, the computed requirement objective represents a 6-month to 3-year supply, depending on the item value. This procedure determines the quantity of spare parts to be bought, retained, canceled from procurement, transferred to other agencies, or otherwise disposed of. Having enough spare parts and supplies is essential for keeping Air Force weapon systems operational. If too few parts are bought, operational readiness is impaired. If too many are acquired, money is wasted.

A computerized system at the air logistics centers computes stock levels and material requirements for all System Support Stock Fund items. It is run four times per month using the most current data. One of its functions is to provide item managers with notices identifying items with excess on-order stocks. These notices are initially provided to an item manager whenever the item has excess due-in valued

at over \$1,000. After the initial notice, a repeat notice is only produced on a 90-day cycle.

SCOPE OF REVIEW

90/1
We reviewed and examined DOD's and the Air Force's policies, procedures, and practices at Headquarters, Air Force Logistics Command, and at selected air logistics centers for identification and cancellation of excess stocks due-in and for making small dollar issues from depot stocks. We also interviewed headquarters and center officials responsible for carrying out these activities and made various computer analyses to compare and select random samples.

We made our review from August 1978 to April 1979 at the following locations:

- Headquarters, Air Force Logistics Command, Wright-Patterson AFB, Ohio.
- Oklahoma City Air Logistics Center, Tinker AFB, Oklahoma.
- San Antonio Air Logistics Center, Kelly AFB, Texas.

At the conclusion of our fieldwork, we held exit conferences with officials of each audited activity and, where appropriate, included their comments in the report.

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CHAPTER 2

IMPROVEMENTS NEEDED IN SYSTEM

TO CONTROL STOCK EXCESSES

By 9/2

As of September 30, 1978, two of the five air logistics centers--San Antonio and Oklahoma City--had \$50.3 million in excess stocks on order for items having \$8.3 million of stock onhand exceeding requirement objectives. Also, for fiscal year 1979, the Air Force System Support Stock Fund's obligational authority was inflated by an estimated \$25.5 million. The Air Force could save tens of millions of dollars annually in procurement costs by

- eliminating a permissive overstockage criteria which is used to identify excess on-order stocks,
- eliminating duplicate requirements from "buy computations" and requests for obligational authority,
- requiring more timely identification and cancellation of excess requirements, and
- filling war reserve and foreign military sales requirements from available stocks.

NEED TO ELIMINATE PERMISSIVE
OVERSTOCKAGE POLICY

Inventory managers at Air Force logistics centers are automatically provided initial and followup quarterly notices of items with excess stock on order valued at \$1,000 or more so that planned buys or quantities already on contract for these items can be canceled. These notices considerably understate the amount of overstock because they show only the extent to which stocks onhand and due-in from planned buys or contracts exceed requirements by 6 months or more. If this permissive overstockage criteria had not been used to compute excess on-order stocks, the amount of stocks on order exceeding requirements would have increased about 85 percent at the Oklahoma and San Antonio Centers.

As of September 1978, the Oklahoma City and San Antonio Air Logistics Centers' notices of excess stocks on order showed 2,343 items with \$1,000 or more excess stocks due-in, totaling \$27.2 million from planned buys or contracts. Excluding the permissive overstockage resulted in 4,512 items with \$50.3 million of excess due-ins from planned buys or quantities on contracts, or about \$23.1 million more than

that shown on the excess on-order notices. Additionally, \$8.3 million of excess stocks were onhand for these items.

Most of the \$23.1 million of unidentified excess on-order stocks were due-in from planned buys which had not yet been contracted for. Therefore, had these excess on-order stocks been promptly identified they could have been canceled prior to contract award, thus avoiding contractor termination charges.

According to Air Force Logistics Command requirements personnel, there has been no guidance on the establishment of a termination level, and the termination level currently used is merely a management tool to assist item managers in managing their items. They said that the 6 months or more overstockage in the current termination formula is arbitrary and has no statistical or historical support.

In contrast to the Air Force's policy of identifying and attempting to cancel only those stocks on order exceeding requirements by 6 months or more, the Army and Navy promptly identify and cancel stocks on order valued at \$1,000 or more which exceed requirements. Also, the General Services Administration (GSA) concurred with our finding in a prior report that its 3-month permissive overstockage policy used to identify excess on-order stocks was unreasonable and costly. Consequently, in March 1978 GSA abolished its permissive overstockage policy.

NEED TO ELIMINATE DUPLICATE REQUIREMENTS FROM BUY COMPUTATIONS

Our analysis of randomly selected items with excess stocks on order disclosed that one of the principal reasons for the excess was the duplication of unfilled orders in requirements computations. As a result, we estimate that the Air Force's requirements and related obligational authority for expenditure of stock funds was inflated by \$25.5 million in fiscal year 1979. Also, we found that the San Antonio and Oklahoma City Air Logistics Centers overprocured \$6.7 million worth of stock.

The duplication occurs because two data systems use the same source data input to the requirements computation system. The back order data system processes unfilled orders for maintenance requirements that could not be satisfied by onhand assets. The depot supply data system also processes the same unfilled maintenance requirements. Both of these systems use the planned maintenance workloads data system as their source.

A computer analysis of all items with excess stocks on order revealed that as of September 1978, \$8.1 million and \$2.1 million requirements were duplicated at the Oklahoma City and San Antonio Centers, respectively, for 2,878 items. Oklahoma City Center personnel were aware of the duplication as early as February 1978, but at the time of our review they were not always making adjustments to reduce buy notices to eliminate the duplication. We found that one item management section at the Oklahoma City Center was manually adjusting requirements to eliminate the duplication in buying its more active high-dollar items. This section had reduced purchase requirements by about \$3.5 million as of September 1978 to eliminate the duplication. San Antonio Center personnel stated they were not aware of this problem and had not made any adjustments to buy computations.

Although item managers at the Oklahoma City Center have made some manual adjustments for buy computations, they have not corrected the computer system which generates the duplicate requirements. Consequently, the inflated requirements data is used in total in Air Force System Support Stock Fund budget requests. Therefore, the entire \$10.2 million of duplicated requirements from the Oklahoma City and San Antonio Centers were included in the request for apportionment of obligation authority which was granted.

Since all air logistics centers are guided by uniform policies issued by the Air Force Logistics Command and use the same supply management computer systems, it is likely that similar conditions exist at the other three centers. Therefore, the total request for fiscal 1979 could be inflated as much as \$25.5 million at the five air logistics centers.

NEED TO CANCEL OR REDUCE EXCESS
ON-ORDER STOCKS IN A MORE TIMELY MANNER

As of September 1978, Air Force reports of excess on-order stocks showed that the Oklahoma City and San Antonio Centers had 2,343 items with excess stocks on order of \$1,000 or more, which totaled \$27.2 million. Relatively few of the excess on-order stocks were being canceled because of untimely or ineffective actions by item managers. For example, at one of the two centers only \$943,300 out of \$15.8 million excess on-order stocks were canceled. Higher management levels responsible for approving the release of procurement funds and for monitoring supply performance did not know the magnitude of excess on-order stocks at the air logistics centers or the performance of the centers in controlling these excesses. This condition was due to the lack of a system for monitoring and evaluating performance in this area.

Our analysis of a statistical sample showed that the two centers could have canceled as much as \$6.2 million by identifying or canceling excess on-order quantities in a more effective and timely manner, as shown by the following examples:

- Stock No. 2840-00-654-2327 RU. The available assets on the buy notice showed 28,865 units. Actually, 128,865 units, or about 7 years of supply, were onhand. The error occurred because the computer field capacity did not carry unit quantities over 99,999. As a result, the item manager initiated procurement for 42,000 units valued at \$6,720. The computer field capacity was later increased, and the 42,000 units were shown on a termination notice issued 31 days after the contract award date. The item manager said that no attempt was made to cancel the contract because in the past the contractor would not cancel the contract without excessive termination costs and because there was a continuing need for the items. With the 42,000 items on order, the Air Force had over 9 years of supply onhand and on order.

- Stock No. 2840-00-560-3003 RT. The item manager initiated purchase requests for 1,800 and 2,100 units (a total of 3,900 units) on October 5, 1977, and October 25, 1977, respectively. The contract was awarded on October 14, 1977, for the 1,800 units and on November 4, 1977, for the 2,100 units. On November 9, 1977, the item manager discovered a duplication of purchase requests and requested the procurement section to cancel the contracts. The procurement section canceled the 1,800 units but did not cancel the 2,100 units. The 2,100 units, valued at \$86,920, had not been canceled because the item manager failed to followup his request to procurement as required by Air Force regulations. Regulations require item managers to follow up on requests for terminations on a 5- to 7-day cycle to ensure that the procurement section has taken appropriate action.

- Stock No. 2995-00-434-0830. The item manager initiated procurement for 115 units on July 15, 1977. The requirement computation at that time showed one unit onhand and none due-in. However, this data was incorrect since the item manager had documents showing that 163 units costing \$4,564 were received on July 14, 1977. These units were picked up on the stock records on August 15, 1977. As a result of this discovery and a significant decrease in average monthly demand, the

item manager was notified on August 15, 1977, that 210 units onhand and on order exceeded requirements. Despite the excess status of this item, a contract for the 115 units was awarded on November 3, 1977.

--Stock No. 2840-00-832-3305 RX. The first excess on-order notice was issued to the item manager on July 15, 1978, for a quantity of 37. Another excess on-order notice was issued on October 15, 1978, for a quantity of 61. Despite these notices, a contract for 148 units, costing \$17,584, was awarded on November 1, 1978. On January 15, 1979, a third excess on-order notice was issued to the item manager for more than the 148 on contract. The item manager did not terminate the order because he anticipated an increase in demands. However, a schedule of overhaul requirements for the end item through fiscal year 1984 showed gradually decreasing demands.

Item managers generally stated that the dollar value or quantity on the initial notice is sometimes not significant in terms of the total purchase request. They also stated that since there was a continuing need for these items, the excess quantities on the purchase requests should not be canceled or reduced.

This was not the case for our sample of excess on-order items. The excess on order for these items represented several years' supply, and there was a declining trend in demands.

Also, most items in our sample would have received three or more termination notices before the contract award date if such notices were made on a monthly basis after the first notice instead of the current 90-day cycle. The shorter cycle would have allowed item managers to observe the decrease in requirements and the corresponding rise in excess quantities due-in from planned buys. This would have alerted the item managers to terminate the contract before it was awarded, thus avoiding contractor termination charges.

NEED TO FILL SPECIAL REQUIREMENTS FROM AVAILABLE STOCKS

Our random sample showed that as much as \$2.1 million of excess due-ins could have been avoided by using available assets to fill requirements for war readiness material and foreign military sales. The following examples illustrate excess due-ins caused by this condition:

--Stock No. 3110-00-588-7874 YP. On March 17, 1978, the item manager had 3,520 units onhand and on order, representing 2-1/2 years' supply, when he prepared a purchase request for 569 units to satisfy a war readiness requirement. At this date, the computed requirement objective, which included the war readiness requirement, was 3,425 units, or 95 units less than the onhand and on-order quantity. On October 31, 1978, the item manager received an excess on-order notice for this item showing that 333 units of this item due-in from planned, but not yet contracted, buys exceeded requirements by more than 6 months. Also at this time, the requirement objective for this item, including the war reserve requirement, was 2,205 units, and the quantity onhand and due-in from planned buys was 3,011. Notwithstanding, the contract for the entire war readiness requirement of 569 items valued at \$23,386 was awarded on November 17, 1978.

--Stock No. 2840-00-012-0835 PF. On May 19, 1978, a contract for 470 units valued at \$263,200 was awarded to satisfy foreign military sales requirements. At the time of the contract award, 269 units were onhand which exceeded all foreseeable Air Force needs, and thus available for contingency purposes, such as foreign military sales. Accordingly, the 269 units should have been used to fill a portion of the requirement for 470 units and a contract awarded for 201 units. Had this been done, excess on-order items valued at \$150,640 could have been avoided.

DOD's policy encourages the use of available assets to fill special requirements. However, supply officials at the air logistics centers advised us that they are reluctant to use these assets because the special requirements are funded and contracted separately from normal peacetime requirements.

CONCLUSION

The Air Force can reduce investments in inventories by tens of millions of dollars annually by improving its system for controlling stock excesses and by placing greater management emphasis on the need for timely cancellation or deferral of procurements for items in excess of normal system requirements.

Moreover, foreign military sales and war readiness requirements should be filled whenever possible from existing onhand and on-order stock.

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RECOMMENDATIONS

We recommend that the Secretary of Defense direct the Air Force to:

- Eliminate permissive overstockage from its computations of excess stocks on order.
- Revise computer programs so that duplicate requirements are not included in the buy computations.
- Provide for more timely identification and effective cancellation of excess on-order stocks by (1) improving the timeliness of the notices of quantities on order exceeding requirement objectives, (2) placing greater emphasis on the need for cancellation of procurements in excess supply, (3) systematically monitoring and measuring item managers' performance in canceling excess on-order stock, and (4) requiring that air logistics centers submit to the Air Force Logistics Command a report showing quarterly average overstock and the average value of overstock canceled along with their annual request for stock fund apportionment of obligation authority.
- Fill war readiness and foreign sales requirements from available stocks to the maximum extent practicable.

CHAPTER 3

SAVINGS AVAILABLE THROUGH MORE

ECONOMICAL ISSUES OF LOW-COST ITEMS

In 1 year, the Oklahoma City and San Antonio Air Logistics Centers incurred warehouse processing costs equal to 121 percent of the selling price in making 402,550 issues priced at \$5 or less. The total sales value of these issues was \$814,340. Warehouse handling costs related to these sales amounted to \$981,950 because the depots frequently issued small low-cost items on an each basis rather than in standard commercial pack quantities. These centers could eliminate about 128,200 issues and reduce warehouse handling costs about \$358,700 a year by issuing low-cost items in more economical units of issue.

We believe similar savings would occur at other Air Force logistics centers as well as in GSA activities as previously reported. 1/ In our opinion, millions of dollars a year could be saved on a Government-wide basis through more economical issues of low-cost items.

NEED TO ESTABLISH ECONOMICAL UNITS OF ISSUE

During January and February 1978, the Oklahoma City and San Antonio Centers filled about 67,000 requisitions priced at \$5 or less. These low-value transactions amounted to only 2/100 of 1 percent of the total sales value for the period. However, they represented 14.5 percent of the total requisitions filled, as shown in the following table.

San Antonio and Oklahoma City Air Logistics Centers

<u>Value of issue</u>	<u>Number</u>	<u>Percent</u>	<u>Dollar value</u>	<u>Percent</u>
\$5 or less	67,093	14.5	\$ 135,723	0.02
More than \$5	<u>396,160</u>	<u>85.5</u>	<u>769,389,264</u>	<u>99.98</u>
	<u>463,253</u>	<u>100.0</u>	<u>\$769,524,987</u>	<u>100.00</u>

1/LCD-78-212, dated Jan. 18, 1978.

To evaluate the feasibility of issuing low-cost items in more economical quantities, we statistically sampled the 67,000 requisitions. Approximately 80 percent of the items had a unit of issue of each and 53 percent had a unit pack quantity of more than one. A unit pack is the number of units of issue packaged in a shipping container. For example, cigarettes are sold in units of issue by the pack and in unit packs of ten to a carton.

Analysis of customer demands for the selected items for 1 year revealed that approximately 68 percent had repetitive orders during the year. We determined that an average of 41 percent of the off-base issues and 28 percent of the local issue items could be issued in unit pack quantities and thereby reduce the total number of issues.

Examples of repetitively ordered small quantities of the same items by the same customer are shown below:

<u>Stock No./ description</u>	<u>Unit of issue</u>	<u>Unit pack quantity</u>	<u>Date issued</u>	<u>Issue quantity</u>	<u>Number of requisitions</u>	<u>Total value</u>
2840-00-305 7370 RU	Each	5	Sept. 1977	1	1	\$2.54
			Jan. 1978	1	1	2.54
			Jan. 1978	3	1	7.62
			Jan. 1978	1	1	2.54
53-00-956- 0693 NT shim	Each	10	Oct. 1977	34	12	5.10
			Feb. 1978	2	1	.30
			Feb. 1978	20	5	3.00
			Feb. 1978	26	8	3.90
			Feb. 1978	8	4	1.20
			Feb. 1978	8	3	1.20
2840-00-312 9050 RU bracket tube clip	Each	25	Feb. 1978	3	1	1.26
			Feb. 1978	5	1	2.10
			Feb. 1978	7	1	2.94
			Mar. 1978	17	1	7.14
			Mar. 1978	7	1	2.94
			Apr. 1978	20	1	8.40
			Apr. 1978	10	1	4.20
			Apr. 1978	9	2	3.78
			May 1978	21	2	8.82
			May 1978	13	1	5.46
			May 1978	29	2	12.18
			May 1978	9	1	3.78
			May 1978	62	2	26.04
			May 1978	10	1	4.20
8475-00-173- 9054 camouflage film	Pack	3	Nov. 1977	1	1	1.27
			Nov. 1977	1	1	1.27
			Jan. 1978	1	1	1.27
			Jan. 1978	1	1	1.27
			Jan. 1978	1	1	1.27
			Jan. 1978	1	1	1.27
			Jan. 1978	1	1	1.27
			Apr. 1978	1	1	1.27
			Apr. 1978	2	1	2.54
			Apr. 1978	2	1	2.54
			Apr. 1978	1	1	1.27
			Apr. 1978	1	1	1.27
			May 1978	1	1	1.27
			May 1978	1	1	1.27
			May 1978	1	1	1.27
			May 1978	1	1	1.27
			Aug. 1978	5	5	6.35
Aug. 1978	79	1	100.33			

The Air Force estimated that the warehouse direct labor costs to fill a small item requisition are \$5.06 at Oklahoma City and \$4.55 at San Antonio per off-base issue and \$2.45 at Oklahoma City and \$0.82 at San Antonio per local issue. Using these costs, we estimate an annual savings of about \$358,720 at the Oklahoma City and San Antonio centers by issuing low-cost items in more economical units of issue as shown below:

Estimate of Annual Savings that Could Be Achieved If
Low-cost Items Were Issued in Unit Pack Quantities

<u>Depot</u>	<u>Type of issue</u>	<u>Number of small issues per year</u>	<u>Reduction in number of issues if made in unit packs</u>	<u>Direct labor costs per issue</u>	<u>Annual savings</u>
Oklahoma City	Off base	49,870	20,448	\$5.06	\$103,470
Oklahoma City	Local	147,580	47,224	2.45	115,700
San Antonio	Off base	53,590	24,116	4.55	109,730
San Antonio	Local	151,510	36,366	.82	29,820
Total					<u>\$358,720</u>

If similar conditions exist at the other three air logistics centers, the total annual savings in Air Force depot operations could be as much as \$897,000 a year by issuing low-cost items in minimum commercial standard pack quantities rather than on an each basis.

Need to more accurately establish unit pack quantities

Additional opportunities for more economical issues of low-cost items can be achieved through more accurate determinations of unit pack quantities. The unit pack and unit of issue assigned to an item become part of the procurement specifications given to suppliers for future purchases of an item. The method for computing the unit pack quantity is established in military standards MILSTD-794 (WP).

Fifty-eight percent of the off-base sample items had a unit pack quantity of one. Using the prescribed standards, as set forth in military standards MILSTD-794 (WP), we determined that a higher unit pack quantity was appropriate for 24 percent of these items. Applying this rate to the total low-cost issues from Oklahoma City and San Antonio depots, approximately 35,000 issues per year are for items which have a unit pack quantity in the supply catalog that is lower than the guidelines suggest as appropriate.

For example, a plotter protractor, stock number 6605-00-064-1386, costing \$1.02 each shows a unit pack quantity of one. Applying the military standard relative to the cost, weight, cube, packaging, replacement factors and application data for the item, the appropriate unit pack quantity should be 10. Many of the customers had repetitive orders. For example, one customer had orders for quantities of 3, 1, 1, 1, 12, 3, and 1, or a total of 22 items in seven issues, during the year. Many of these orders could have been avoided had the item been available in unit packs such as ten.

PREVIOUS STUDIES

The repetitive issue of low-cost items in small quantities seems to be a Government-wide problem. In addition to the problems identified in Air Force logistics centers operations, we also reported similar problems in GSA operations. In our January 1978 report (LCD-78-212) to the Administrator of General Services, we recommended that GSA increase the units of issue quantities in its supply catalog for low-value items to quantities either consistent with the minimum commercial standard pack or to quantities repetitively ordered by customers over a short timespan.

Our analysis of GSA's activities disclosed that if repetitive issue of low-cost items could be reduced by a minimum of one issue per year, approximately 163,000 issues could be eliminated at an annual reduction of \$284,000. GSA concurred but declined to adopt our recommendation on the basis that its unit of issue policy was derived from DOD Instruction 4140.39 which GSA interpreted as requiring that an item be issued in its smallest identifiable unit quantity. Since DOD is by far its largest customer, GSA stated that the present philosophy for unit of issue designations must remain in effect until changes are initiated within DOD.

DOD and GSA have made item reduction studies to eliminate items of similar or like characteristics from the Federal supply systems. It may be practicable to expand the responsibility of these groups to include reviews of units of issue for low-dollar-value items with the objective of increasing the units of issue to commercial standard packs or to economical usable unit packs.

CONCLUSION:

Air Force depots filled many individual requisitions for low-value amounts, which were repetitive, and incurred processing costs which exceeded their sales value. The large volume of these issues made yearly by Air Force depots could be substantially reduced and significant savings in warehouse handling costs could be realized by establishing more economical units of issue.

RECOMMENDATIONS

We recommend that the Secretary of Defense, in coordination with the Administrator of General Services, revise the unit of issue of low-cost items to

- increase the unit of issue quantities in the supply catalog to minimum standard packs, wherever feasible;
- require that unit pack quantities be determined in accordance with prescribed standards; and
- emphasize the need to establish more economical units of issue when new items are entered in the supply system.

CHAPTER 4

AGENCY COMMENTS AND OUR EVALUATION

On June 26, 1979, we furnished the Secretary of Defense with advance copies of a draft of this report. On September 10, 1979, the Principal Deputy Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) provided us with DOD's comments to the draft report. (See app. I.)

DOD concurred in whole or in part with all of our recommendations. In those instances of concurrence, DOD informed us that the Air Force has taken the necessary action to implement our recommendations. In those instances of partial concurrence, the Secretary of Defense has requested that the Air Force review the procedures of each of the other military departments and the Defense Logistics Agency as an initial step toward the implementation of a more justifiable approach for handling procurement cutbacks of on-order stocks that exceed normal system requirements. The Secretary also stated that concurrent with this analysis, the Air Force will consider the benefits of 30-day repetitive notices of quantities of stock on order exceeding requirement objectives. If sufficient benefits are indicated, such notices will be provided to item managers.

In responding to our recommendation that the Secretary direct the Air Force to eliminate permissive overstockage from its computations of excess stocks on order, the Secretary stated that an additional level, not necessarily a 6-month supply, was justified to avoid a repetitive series of procurement and cutback actions caused by fluctuations in demand. If the requirement objectives and the reorder levels are computed correctly using valid and accurate data, there should be no need for uneconomical repetitive series of procurements. Furthermore, unpredictable fluctuations in demand are, according to all definitions of its purpose, supposed to be provided for by the quantities included in the computed safety level. 1/

1/DOD Dictionary of Military and Associated Terms, the Joint Chiefs of Staff; "Supply Management" published by Industrial College of Armed Forces; and Air Force Regulation 67-87, attachment 3.

Therefore, we believe that our recommendation that the Secretary direct the Air Force to eliminate its permissive overstockage policy for the purpose of identifying excess stocks on order is valid.

As stated on page 4 of this report, neither the Army, nor the Navy, nor GSA has such a policy. Therefore, we see no reason for further study.



ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D C 20301

10 SEP 1979

Mr. R. W. Gutmann
Director, Logistics and
Communications Division
General Accounting Office
Washington, DC 20548

Dear Mr. Gutmann:

This is in response to your Draft Report B-146828 dated June 26, 1979, titled, "Millions of Dollars Can Be Saved by Improved Management of Air Force Inventories" (LCD-79-222; OSD Case #5224).

Comments received from the Air Force have been considered in preparation of the enclosed response which addresses each of the recommendations contained in the Draft Report.

We appreciate the opportunity to comment on this report in draft form.

Enclosure
As stated

Sincerely,


Richard Danzig
Principal Deputy Assistant Secretary
of Defense (MRA&L)

DEPARTMENT OF DEFENSE
RESPONSE TO GAO DRAFT REPORT"Millions of Dollars Can Be Saved by Improved Management
of Air Force Inventories" (LCD-79-222; OSD Case #5224)

Recommendation: That the Secretary of Defense direct the Air Force to eliminate its permissive overstockage policy.

Response: Concur in part. As stated in the Draft Report, the Air Force uses, as a termination point for procurement cutback actions, an asset level corresponding to six months above the requirements objective. This additional quantity is referred to in the Draft Report as a "permissive overstockage quantity." In our opinion, an additional level is justified in order to avoid a repetitive series of procurement and cutback actions caused by fluctuations in demand. However, there is no specific justification for the six-month level used by the Air Force.

The Air Force has been requested to review the procedures of each of the other Military Services and the Defense Logistics Agency (DLA) as an initial step in the implementation of a more justifiable approach for handling procurement cutbacks.

Recommendation: That the Secretary of Defense direct the Air Force to revise computer programs so that duplicate requirements are not included in the buy computations.

Response: Concur. The Air Force has initiated the necessary corrections to eliminate the duplication of backorder requirements in the computational system. A system change initiated in June 1979 has eliminated the duplication of priority 9 through 15 backorders. In addition, item managers have been instructed to manually delete duplicate priority 1 through 8 backorders until such time as the necessary system changes are made.

Recommendation: That the Secretary of Defense direct the Air Force to provide for more timely identification and effective cancellation of excess on-order stocks by (1) improving the timeliness of the notices of quantities on order exceeding requirement objectives; (2) placing greater emphasis on the need for cancellation of procurements of items in excess supply; (3) systematically monitoring and measuring item managers' performance in cancelling excess on-order stock; and (4) requiring that the Air Logistics Centers (ALCs) submit to the Air Force Logistics Command (AFLC), with their annual request for stock fund apportionment of obligation authority, a report showing quarterly average overstock and the average value of overstock cancelled.

Response: Concur in part. In the past, Air Force item managers received repetitive notices every 30 days. However, some time ago the ALCs unanimously agreed that 30-day notices were not warranted and requested the current 90-day frequency for notices; this request was granted by AFLC. As part of the permissive overstockage analysis the Air Force will consider the possible benefits to be derived from the 30-day repetitive notices; if sufficient benefits are indicated, the 30-day notices will be reinstated. In the interim, item managers will be directed to place maximum emphasis on considering cancellation/termination actions in response to the current quarterly notices. Overall, the Air Force believes current management controls on cancellation/termination actions are adequate and no new reports are required.

Recommendation: That the Secretary of Defense direct the Air Force to fill war readiness and foreign sales requirements from available stocks to the maximum extent practicable.

Response: Concur. The filling of War Reserve Materiel (WRM) and Foreign Military Sales (FMS) requirements from available stocks is in accordance with present Air Force policy. The finding represents a case of non-compliance with established policy. The AFLC has issued new directions to the ALCs which will clarify the policy and place added emphasis upon its compliance.

Recommendation: That the Secretary of Defense, in coordination with the Administrator of General Services, revise the unit of issue of low cost items to (1) increase the unit of issue quantities in the supply catalog to minimum standard packs, wherever feasible; (2) require that unit pack quantities be determined in accordance with prescribed standards; and (3) emphasize the need to establish more economical units of issue when new items are entered in the supply system.

Response: DLA is being tasked to review this area and submit their recommendations to the Office of the Secretary of Defense. Based upon the results of the DLA review and possible subsequent meetings with the General Services Administration, appropriate actions will be taken, with the GAO being so advised.

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